

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/113693 A1

(51) International Patent Classification⁷: **F01N 3/08,**
3/20, F02M 63/02

(21) International Application Number:
PCT/GB2004/002612

(22) International Filing Date: **18 June 2004 (18.06.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
0314245.2 18 June 2003 (18.06.2003) GB

(71) Applicant (for all designated States except US): **JOHN-
SON MATTHEY PUBLIC LIMITED COMPANY**
[GB/GB]; 3-4 Cockspur Street, Trafalgar Square, London
SW1Y 5BQ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ALLANSSON.**

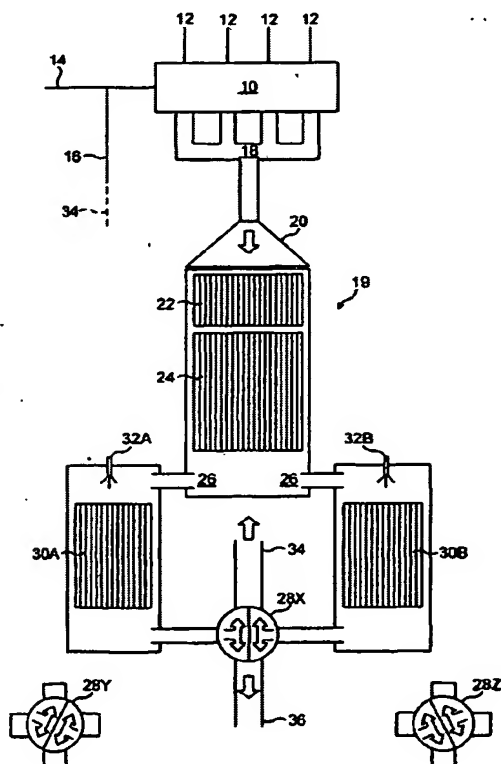
Elve, Tord, Ronny [SE/SE]; Norra Annebergsvagen 123,
S-434 96 Kungsbäcka (SE). **ANDREASSON, Anders,**
Dias [SE/SE]; Traneredsvagen 60A, S-426 77 V. Frolunda
(SE). **LAVENIUS, Mats [SE/SE];** Vandstensvagen 13,
S-433 30 Partille (SE).

(74) Agent: **NUNN, Andrew, Dominic;** Johnson Matthey
Technology Centre, Blounts Court, Sonning Common,
Reading RG4 9NH (GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

[Continued on next page]

(54) Title: **TREATMENT OF NO_x SORBER REGENERATION GAS**



(57) Abstract: A method of treating an exhaust gas of a lean-burn re-
ciprocating engine comprises sorbing NO_x on at least one NO_x sorber
(30A; 30B) when the exhaust gas is lean, intermittently contacting the
at least one NO_x sorber with an agent effective to convert NO_x to N₂,
thereby to regenerate the at least one NO_x sorber and feeding effluent
of said intermittent contacting step to the engine inlet (14).